

----- Forwarded by Craig Dufficy/DC/USEPA/US on 08/23/2016 07:15 AM -----

From: Jana Englander/DC/USEPA/US

To: sjkelly0@tva.gov,

Cc: Betsy Devlin/DC/USEPA/US@EPA, Ross Elliott/DC/USEPA/US@EPA, Richard Robinson/DC/USEPA/US@EPA, Stephen Hoffman/DC/USEPA/US@EPA, James Kohler/DC/USEPA/US@EPA, PatrickM Kelly/DC/USEPA/US@EPA, Craig Dufficy/DC/USEPA/US@EPA, bebrickhouse@TVA.gov, jckammey@TVA.gov, ascooper@TVA.gov

Date: 09/05/2012 03:30 PM

Subject: Comment Request on Coal Ash Site Assessment Round 11 Draft Reports - Tennessee Valley Authority's Fossil Plants: Allen, Bull Run, Colbert, Cumberland, Gallatin, John Sevier, Johnsonville, Kingston, Paradise, Shawnee, Watts Bar, and Widows Creek

Dear Ms. Kelly,

The draft assessment reports for **Tennessee Valley Authority's Fossil Plants: Allen, Bull Run, Colbert, Cumberland, Gallatin, John Sevier, Johnsonville, Kingston, Paradise, Shawnee, Watts Bar, and Widows Creek** are ready for review. EPA would appreciate it if you would review and submit your comments on each of these reports to us within 45 calendar days of receipt of this email. Please confirm receipt of this email and send your comments to:

Mr. Stephen Hoffman
US Environmental Protection Agency (5304P)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

If you are using overnight or hand delivery mail, please use the following address:

Mr. Stephen Hoffman
US Environmental Protection Agency
Two Potomac Yard
2733 South Crystal Drive
5th Floor, N-5237
Arlington, VA 22202-2733

You may also provide your comments by e-mail to hoffman.stephen@epa.gov, kohler.james@epa.gov, and englander.jana@epa.gov.

You may assert a business confidentiality claim covering all or part of the information requested, in the manner described by 40 C. F. R. Part 2, Subpart B. Information covered by such a claim will be disclosed by EPA only to the extent and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when EPA receives it, the information may be made available to the public by EPA without further notice to you. If you wish EPA to treat any of your response as "confidential" you must so advise EPA when you submit your response.

The draft reports can be accessed at the secured link below. The secured link will expire in 30 days.

Here are the links for each report:

Allen Fossil Plant	https://www.yousendit.com/download/TEhXRm8rcTlzS3B3SGNUQw
Bull Run Fossil Plant	https://www.yousendit.com/download/TEhXRm8rcTJiV3cwTWRVag
Colbert Fossil Plant	https://www.yousendit.com/download/TEhXRm8rcTJqV0RIRHRVag

Cumberland Fossil Plant	https://www.yousendit.com/download/TEhXRm81Qk4yWGVGa2NUQw
Gallatin Fossil Plant	https://download.yousendit.com/UW16c0x6MGNwaFN4djhUQw
John Sevier Fossil Plant	https://download.yousendit.com/UW15ZEV3Q3RRYThaQ2NUQw
Johnsonville Fossil Plant	https://download.yousendit.com/UW15ZEV3Q3RJMhQzZU1UQw
Kingston Fossil Plant	https://download.yousendit.com/UW16c0wxSWhOQnpYk1UQw
Paradise Fossil Plant	https://download.yousendit.com/UW15ZEV3Q3RnYU1aQ2NUQw
Shawnee Fossil Plant	https://download.yousendit.com/UW15ZEV3Q3RCTW5IRHRVag
Watts Bar Fossil	https://download.yousendit.com/UW15ZEV3Q3QzeUtFTmNUQw
Widows Creek Fossil Plant	https://download.yousendit.com/UW16c0x6VEhwcFZjR01UQw

Please let me know if you have trouble accessing the reports or have any questions/requests.

Respectfully,

Jana Englander

Jana Englander
Materials Recovery and Waste Management Division
703 308 8711

EPA-101

----- Forwarded by Craig Dufficy/DC/USEPA/US on 08/23/2016 01:48 PM -----

From: "Kelly, Susan Jane" <sjkelly0@tva.gov>
To: "Cooper, Annemarie Smith" <ascooper@tva.gov>, Jana Englander/DC/USEPA/US@EPA,
Cc: Betsy Devlin/DC/USEPA/US@EPA, Ross Elliott/DC/USEPA/US@EPA, Richard Robinson/DC/USEPA/US@EPA, Stephen Hoffman/DC/USEPA/US@EPA,
James Kohler/DC/USEPA/US@EPA, PatrickM Kelly/DC/USEPA/US@EPA, Craig Dufficy/DC/USEPA/US@EPA, "Brickhouse, Brenda Etheridge"
<bebrickhouse@tva.gov>, "Kammeyer, John C" <jckammey@tva.gov>, "Markham, Wilbourne C Jr" <wcmarkham@tva.gov>, "Henry, Amy Burke"
<abhenry@tva.gov>, "Anderson, Cynthia M" <cmmanderson@tva.gov>, "Tipton, James Darrell II" <jdtipton@tva.gov>
Date: 09/06/2012 09:58 AM
Subject: RE: Comment Request on Coal Ash Site Assessment Round 11 Draft Reports - Tennessee Valley Authority's Fossil Plants: Allen, Bull Run, Colbert, Cumberland, Gallatin, John Sevier, Johnsonville, Kingston, Paradise, Shawnee, Watts Bar, and Widows Creek

TVA's IT security originally blocked this site. I have requested and received permission from TVA IT to view the site. I downloaded the reports to a TVA EP&C Sharepoint. You should be able to access the reports now at

<http://sharepoint.tva.gov/sites/oer/EPC/EPA%20Dyke%20Reports/Forms/AllItems.aspx>.

Susan J. Kelly

From: Cooper, Annemarie Smith
Sent: Thursday, September 06, 2012 9:49 AM
To: 'Englander.Jana@epamail.epa.gov'; Kelly, Susan Jane
Cc: 'Devlin.Betsy@epamail.epa.gov'; 'Elliott.Ross@epamail.epa.gov'; 'Robinson.Richard@epamail.epa.gov'; 'Hoffman.Stephen@epamail.epa.gov'; 'Kohler.James@epamail.epa.gov'; 'Kelly.PatrickM@epamail.epa.gov'; 'Dufficy.Craig@epamail.epa.gov'; Brickhouse, Brenda Etheridge; Kammeyer, John C
Subject: Re: Comment Request on Coal Ash Site Assessment Round 11 Draft Reports - Tennessee Valley Authority's Fossil Plants: Allen, Bull Run, Colbert, Cumberland, Gallatin, John Sevier, Johnsonville, Kingston, Paradise, Shawnee, Watts Bar, and Widows Creek

Hi Jana,

We are having difficulties accessing the reports. We have alerted our IT folks but in the interim, I also thought I would see if you had alternate formats or access points we might be able to try.

Thanks,
Annemarie

From: Jana Englander [<mailto:Englander.Jana@epamail.epa.gov>]
Sent: Wednesday, September 05, 2012 03:30 PM
To: Kelly, Susan Jane
Cc: Betsy Devlin <Devlin.Betsy@epamail.epa.gov>; Ross Elliott <Elliott.Ross@epamail.epa.gov>; Richard Robinson <Robinson.Richard@epamail.epa.gov>; Stephen Hoffman <Hoffman.Stephen@epamail.epa.gov>; James Kohler <Kohler.James@epamail.epa.gov>; PatrickM Kelly <Kelly.PatrickM@epamail.epa.gov>; Craig Dufficy <Dufficy.Craig@epamail.epa.gov>; Brickhouse, Brenda Etheridge; Kammeyer, John C; Cooper, Annemarie Smith
Subject: Comment Request on Coal Ash Site Assessment Round 11 Draft Reports - Tennessee Valley Authority's Fossil Plants: Allen, Bull Run, Colbert, Cumberland, Gallatin, John Sevier, Johnsonville, Kingston, Paradise, Shawnee, Watts Bar, and Widows Creek

The remainder of EPA-101 falls within EPA-100

-----Forwarded by Jana Englander/DC/USEPA/US on 10/23/2012 02:04PM -----

To: <lt, sikelly0@tva.gov>, Jana Englander/DC/USEPA/US@EPA

From: <lt

Date: 10/22/2012 07:30PM

Cc: Stephen Hoffman/DC/USEPA/US@EPA, James Kohler/DC/USEPA/US@EPA, <lt, bebrickhouse@tva.gov>, <lt, jckammey@tva.gov>, <lt, ascooper@tva.gov>, <lt, dlbowling@tva.gov>, <lt, gakelle0@tva.gov>, <lt, rlsanchez@tva.gov>, <lt, wcmarkham@tva.gov>, <lt, cmanderson@tva.gov>

Subject: RE: Comment Request on Coal Ash Site Assessment Round 11 Draft Reports - Tennessee Valley Authority's Fossil Plants: Allen, Bull Run, Colbert, Cumberland, Gallatin, John Sevier, Johnsonville, Kingston, Paradise, Shawnee, Watts Bar, and Widows Creek

To all:

Please see the following corrected link to the Shawnee File:

<ftp://info.tva.gov/incoming/Shawnee.response.pdf>

Thanks,

Scott Turnbow

Generation Projects & Civil Construction

Senior Manager of Projects Engineering

Tennessee Valley Authority

1101 Market Street, LP 5E

Chattanooga, TN 37402

Work: 423.751.3031

Cell: 423.290.1654

From: Kelly, Susan Jane

Sent: Monday, October 22, 2012 10:47 AM

To: 'Jana Englander'

Cc: 'Stephen Hoffman'; 'James Kohler'; Brickhouse, Brenda Etheridge; Kammeyer, John C; Cooper, Annemarie Smith; Bowling, David L Jr; Kelley, George A; Turnbow, Michael S; Sanchez, Roberto Luis; Markham, Wilbourne C Jr; Anderson, Cynthia M

Subject: RE: Comment Request on Coal Ash Site Assessment Round 11 Draft Reports - Tennessee Valley Authority's Fossil Plants: Allen, Bull Run, Colbert, Cumberland, Gallatin, John Sevier, Johnsonville, Kingston, Paradise, Shawnee, Watts Bar, and Widows Creek

Ms. Englander,

TVA has completed a review of the draft assessment reports mentioned in your email below. Our response letter and specific comments on each report can be found at the following links:

TVA Response Letter

[ftp://info.tva.gov/incoming/10 19 12 FINAL Draft Report Comments.pdf](ftp://info.tva.gov/incoming/10%2019%2012%20FINAL%20Draft%20Report%20Comments.pdf)

Allen Fossil Plant Response

<ftp://info.tva.gov/incoming/Allen.response.pdf>

Cumberland Fossil Plant Response

<ftp://info.tva.gov/incoming/Cumberland.response.pdf>

Gallatin Fossil Plant Response

<ftp://info.tva.gov/incoming/Gallatin.response.pdf>

John Sevier Fossil Plant Response

[ftp://info.tva.gov/incoming/John Sevier.response.pdf](ftp://info.tva.gov/incoming/John%20Sevier.response.pdf)

Johnsonville Fossil Plant Response

<ftp://info.tva.gov/incoming/Johnsonville.response.pdf>

Paradise Fossil Plant Response

<ftp://info.tva.gov/incoming/Paradise.response.pdf>

Shawnee Fossil Plant Response

<ftp://info.tva.gov/incoming/Paradise.response.pdf>

Watts Bar Fossil Plant Response

[ftp://info.tva.gov/incoming/Watts Bar.response.pdf](ftp://info.tva.gov/incoming/Watts%20Bar.response.pdf)

A hard copy of our response should arrive at your office tomorrow. After you have read the reports, TVA would like to schedule a conference call to discuss any issues. If you have any questions, please let me know.

Susan J. Kelly

Environmental Permits & Compliance

423-751-2058

The remainder of EPA-102 falls within EPA-100



Tennessee Valley Authority, 1101 Market Street, BR4A, Chattanooga, Tennessee 37402

October 19, 2012

Mr. Stephen Hoffman
US Environmental Protection Agency (EPA) (5304P)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

TENNESSEE VALLEY AUTHORITY (TVA) – COMMENTS ON COAL ASH SITE ASSESSMENT
ROUND 11 DRAFT REPORTS FOR ALLEN (ALF), BULL RUN, (BRF) COLBERT (COF),
CUMBERLAND (CUF), GALLATIN (GAF), JOHN SEVIER (JSF), JOHNSONVILLE, (JOF)
KINGSTON (KIF), PARADISE (PAF), SHAWNEE (SHF), WATTS BAR (WBF), AND WIDOWS
CREEK (WOF) FOSSIL PLANTS

Dear Mr. Hoffman:

Tennessee Valley Authority (TVA) appreciates the opportunity to provide responses to the recommendations outlined in the Draft Coal Ash Site Assessment Round 11 Draft Reports for TVA's fossil plants. The Draft Reports were attached to EPA's September 5, 2012 email from Jana Englander to TVA's Susan Kelly. This EPA review process has provided TVA a public forum to confirm that our coal ash facilities meet current state requirements.

TVA has contracted with Stantec Consulting Services Inc., to assist in the technical review and responses to the EPA draft reports. The draft report responses are attached for your consideration in finalizing the Coal Ash Site Assessment Round 11 Reports. The following is a summary of our responses;

Allen: A seismic stability analysis and liquefaction analysis have been completed indicating acceptable performance under seismic loading. TVA recommends the Allen East Ash Pond be upgraded from Poor to Satisfactory.

Bull Run: TVA has no additional comments to EPA's analysis.

Colbert: TVA has no additional comments to EPA's analysis.

Cumberland: The operating pool level for the Ash Pond has been lowered 6.2 feet and the seepage analysis has been revised. Piping factors of safety are now satisfactory. TVA recommends the final rating for the Ash Pond be upgraded from Fair to Satisfactory.

A liquefaction potential assessment was performed for the Gypsum Disposal Area and showed the saturated ash materials are anticipated to undergo liquefaction for the 2,500-year earthquake. Therefore, a higher level of slope stability analysis was completed demonstrating that the factor of safety is satisfactory. TVA recommends the final rating for the Gypsum Disposal Area be upgraded from Poor to Satisfactory.

Additional seismic analysis and field investigation is underway for the Dry Fly Ash Stack. The results are indicating the possibility of a favorable response. However, the analysis is not complete. We anticipate its completion during EPA's review of these comments.

Gallatin: A seismic stability analysis for Ponds A and E has been completed with acceptable results. TVA recommends the final rating be upgraded from Fair to Satisfactory.

An additional stability and seepage analysis for the saddle dikes on the stilling ponds has been completed and a project to increase the hydrologic/hydraulic capacity of the ponds is underway. Based on the analysis and improvement plans underway, TVA recommends the Gallatin Stilling Ponds rating be upgraded from Poor to Fair and from Fair to Satisfactory once the project is completed.

John Sevier: The static and seismic slope stability analysis were reviewed and deemed to be appropriate for the soil materials present.

Johnsonville: A quantitative liquefaction analysis and a post-earthquake static slope stability analysis were performed. Results showed the slope to remain stable. As a result, TVA recommends that final rating for Ash Disposal Area 2 be upgraded from Fair to Satisfactory.

Kingston: TVA has no additional comments to EPA's analysis.

Paradise: A liquefaction analysis was performed and the hydrologic/hydraulic capacity was evaluated. The liquefaction analysis indicated that the materials would remain stable and not liquefy during a 2,500 year event. The H&H analysis confirmed that the ponds safely pass the 100-year 24-hour storm. However, they do not pass the Probable Maximum Flood. TVA has plans to design and construct features to correct this issue at the ponds. TVA recommends that the facilities at Paradise be upgraded from Fair to Satisfactory once the H&H issues have been addressed.

Shawnee: A liquefaction analysis and post-earthquake static stability analysis were performed with acceptable results. TVA recommends that the rating for Ash Pond No. 2 be upgraded from Poor to Satisfactory.

Watts Bar: A hydrologic/hydraulic analysis was performed for the design storm and the new spillway system currently under design and in construction. Based on the satisfactory outcome of the analysis; TVA recommends the final rating be upgraded from Fair to Satisfactory.

Widows Creek: TVA has no additional comments to EPA's analysis.

The following is a summary of the draft facility ratings and TVA's proposed final ratings.

EPA Draft Report Results				
Plant	Facility	Draft Rating	Driver for Rating	Stantec Proposed Final Rating
ALF	East Pond	Poor	Seismic	Sat
BRF	FA Pond	Sat		Sat
	BA Pond	Fair	Liquefaction	Fair
	Gyp Pond	Fair	Liquefaction	Fair
COF	Dry Stack	Sat		Sat
	BA Pond	Fair	Liquefaction	Fair
CUF	Ash Pond	Fair	Piping	Sat
	Dry Stack	Poor	Seismic	Poor
	Gyp	Poor	Seismic	Sat
GAF	Ash Ponds	Fair	Liquefaction	Sat
	Stilling Ponds	Poor	H&H and static	Fair
JSF	Dry Stack	Sat		Sat
	Ash pond	Sat		Sat
JOF	Island	Fair	Liquefaction	Sat
KIF	Ash/stilling	Fair	Liquefaction	Fair
	GDA	Sat		Sat
PAF	Scrubber sludge	Fair	H&H - overtopping	Fair
	Ash Pond	Fair	H&H - overtopping	Fair
	Slag Ponds	Fair	H&H - overtopping	Fair
SHF	Ash Pond	Poor	Seismic	Sat
WBF	Pond	Fair	H&H	Sat
WCF	Gyp stack	Sat		Sat
	Ash Pond	Fair	Liquefaction	Fair

Mr. Stephen Hoffman
Page 4
October 19, 2012

TVA takes its environmental responsibilities very seriously and appreciates EPA's efforts to verify the quality of our impoundments. We would like to arrange a conference call once your staff has received this letter and briefly reviewed the attached reports so we can answer any immediate questions or concerns. Please contact Susan Kelly at (423)-751-2058 or sjkelly0@tva.gov to arrange this conference call.

Sincerely,

A handwritten signature in cursive script that reads "Cynthia M. Anderson".

for
Brenda E. Brickhouse
Vice President
Compliance Interface and Permits

Enclosures

Mr. Stephen Hoffman

Page 5

October 19, 2012

SJK:LMB

Enclosures

cc (electronic distribution with enclosures):

- C. M. Anderson, BR 4A-C
- D. L. Bowling, Jr., WT 7D-K
- B. E. Brickhouse, BR 4A-C
- A. S. Cooper, OMA 1A-WDC
- D. M. Hastings, WT 6A-K
- J. C. Kammeyer, LP 5D-C
- G.A. Kelley, LP 3D-C
- S.J. Kelly, BR 4A-C
- A.A. Ray, LP3K-C
- M. S. Turnbow, LP 5G-C
- EDMS (Leslie Bailey), BR 4A-C

From: [Souders, Steve](#)
To: [Jeff Norman](#)
Subject: RE: CCR Rule interpretative questions
Date: Tuesday, April 28, 2015 10:02:00 AM
Attachments: [image001.png](#)

Hi Jeff,

I can answer your first question but I'll have to forward your second question to staff here in the Office of Resource Conservation and Recovery that deal with beneficial use. I, or one of the beneficial use staff, will try to respond to your second question as soon as possible. We are also compiling all questions such as these and will be providing them and the responses on our CCR rule website.

Regarding your first question, we would not consider a CCR leachate impoundment to be a CCR surface impoundment subject to the rule unless the impoundment contains leachate and significant quantities of CCR. The rule defines a CCR surface impoundment as an impoundment that is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR. So, an impoundment intended to only hold CCR leachate would not be a CCR surface impoundment.

Regards,

Steve Souders
Office of Resource Conservation and Recovery (5304P)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0002
Phone: 703-308-8431

From: Jeff Norman [mailto:Jeff.Norman@tn.gov]
Sent: Tuesday, April 28, 2015 9:44 AM
To: Souders, Steve
Subject: CCR Rule interpretative questions

Steve,

I was given your contact information last week by Jon Johnston of EPA Region IV during a Region/States meeting concerning the new CCR Rules. He indicated that you would likely know the answer to 2 of my questions. I would greatly appreciate any enlightenment you could share with me.

My first question deals with the status of CCR leachates. The preamble to the CCR has some discussion on *de minimus* levels of CCR, but the regulatory language does not address what is

considered to be *de minimus*. My question here is does EPA consider CCR leachate (including FGD leachate) to contain *de minimus* quantities of CCR, or is it EPA's opinion that (similar to a Subtitle C interpretation) CCR leachate is derived from CCR, contains constituents of CCR and is therefore itself considered to be CCR? What I am trying to figure out is whether an impoundment that would receive CCR leachate would be considered by EPA to be simply an NPDES impoundment, or would it be considered by EPA to be a CCR impoundment.

My second question deals with CCR beneficial use and the 12,400 ton limit for unencapsulated, non-roadway applications. Specifically, this question pertains to beneficial use of FGD gypsum in agricultural applications for agronomic benefit (soil amendment). Does the 12,400 ton limit apply per source (powerplant), per end use type (e.g., wall board, soil amendment, etc), or per individual user (application site)? If it is per individual user is that limit a maximum that cannot be exceeded ever, or per year (regardless of acreage to which it is applied)? Please bear in mind that it must be demonstrated to not only our satisfaction, but also to the Department of Agriculture that the FGD gypsum is a viable agricultural product, and will be applied at agronomically beneficial rates.

Thanks in advance for your assistance on this matter.

Sincerely,

Jeff Norman
Solid Waste Management Program
Technical Section
Division of Solid Waste Management
William R. Snodgrass Tennessee Tower
312 Rosa Parks Avenue-12th Floor-37243
615-532-0876
Jeff.Norman@tn.gov



Tell us how we're doing! Please take 5-10 minutes to complete [TDECs Customer Service Survey](#)